WHAT IS CLAIMED IS:

1. A composition, comprising:

(a) at least a first monomer comprising at least one ethylenically unsaturated group, and at least one Si-N linkage, at least one Si-O linkage, and/or at least one Si-C linkage; and,

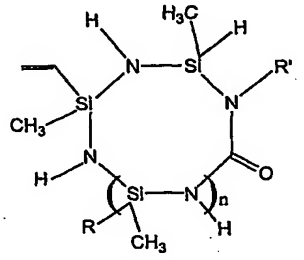
(b) at least a second monomer comprising at least one thiol functional group.

2. The composition according to claim 1, wherein the first monomer comprises at least one vinyl functional group.

3. The composition according to claim 1 or 2, wherein the first monomer comprises at least three Si-N linkages, at least three Si-O linkages, and/or at least one Si-C linkages.

4. The composition according to anyone of claims 1-3, wherein the second monomer comprises two or more thiol functional groups.

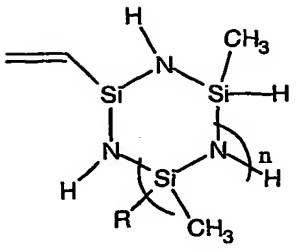
5. The composition according to anyone of claims 1-4, wherein the first monomer is represented by formula (I):



(I)

wherein n is an integer from 1-20, R is H or $CH=CH_2$, and R' is an organic group comprising from 1-20 carbon atoms.

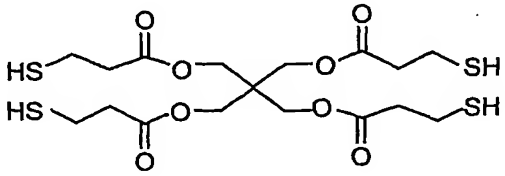
6. The composition according to anyone of claims 1-5, wherein the first monomer is optionally represented by formula (II):



(II)

where R is H or $CH{=}CH_2$, and n is an integer from 1-20.

7. The composition according to anyone of claims 1-6, wherein the second monomer is represented by formula (III):



(III).

8. The composition according to anyone of claims 1-7, wherein the composition comprises a photoinitiator.

9. A method of forming a ceramic material, the method comprising:

(a) reacting at least a first monomer comprising at least one ethylenically unsaturated group with at least a second monomer comprising at least one thiol functional group to form a polymeric material; and,

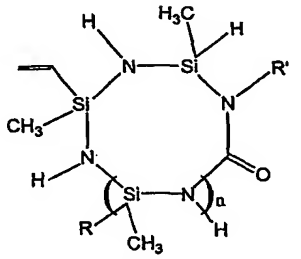
(b) heating the polymeric material to form the ceramic material.

10. The method according to claim 9, wherein the first monomer comprises at least one vinyl functional group.

11. The method according to claims 9 or 10, wherein the first monomer comprises at least one Si-N linkage, at least one Si-O linkage, and/or at least one Si-C linkage.

12. The method according to anyone of claims 9-11, wherein the second monomer comprises two or more thiol groups.

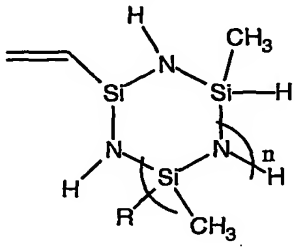
13. The method according to anyone of claims 9-12, wherein the first monomer is represented by formula (I):



(I)

wherein n is an integer from 1-20, R is H or $CH=CH_2$, and R' is an organic group comprising from 1-20 carbon atoms.

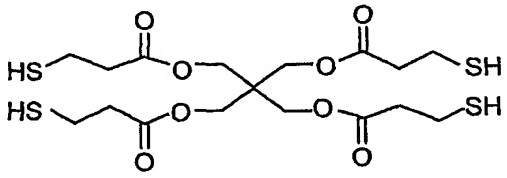
14. The method according to anyone of claims 9-13, wherein the first monomer is optionally represented by formula (II):



(II)

where R is H or $CH=CH_2$, and n is an integer from 1-20.

15. The method according to anyone of claims 9-14, wherein the second monomer is represented by formula (III):



(III).

16. The method according to anyone of claims 9-15, wherein the molar ratio of the first monomer to the second monomer is at least 1:1 in step (a).

17. The method according to anyone of claims 9-15, wherein the molar ratio of the second monomer to the first monomer is more than 1:1 in step (a).

18. The method according to anyone of claims 9-17, wherein step (b) comprises pyrolyzing the polymeric material to form the ceramic material.

19. The method according to anyone of claims 9-18, wherein step (b) is performed at a temperature of at least 700°C.

20. A method of forming a three-dimensional ceramic material comprising:

(1) coating a layer of a composition onto a surface, wherein the composition is used as defined in anyone of claims 1-8;

(2) exposing the layer imagewise to actinic radiation to form an imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the layer in the exposed areas;

(3) coating a layer of the composition onto the previously exposed imaged cross-section;

(4) exposing the layer from step (3) imagewise to actinic radiation to form an additional imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the layer in the exposed areas and to cause adhesion to the previously exposed imaged cross-section;

(5) repeating steps (3) and (4) a sufficient number of times in order to build up a three-dimensional article; and,

(6) pyrolyzing the three dimensional article to form the three dimensional ceramic material.

21. The method according to claim 20, further comprising separating exposed regions of the layer of the composition from unexposed regions of the layer of the composition.

22. The method according to anyone of claims 9-21, further comprising:

(c) sintering the ceramic material.

23. The ceramic material made by the method of anyone of claims 9-22.

24. An article comprising the ceramic material of claim 23.